

IN THE CLAIMS:

Please amend the claims as shown below. The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method comprising:
monitoring one or more system resources to obtain values of a plurality of metrics, including a first metric and a second metric; ~~and~~
a data management process performing one or more I/O operations dependent upon the plurality of metrics, wherein said performing includes determining a scheduling of at least one I/O operation of the one or more I/O operations using a specified weight assigned to the first metric relative to the second metric; and
obtaining user-specified values of one or more parameters to schedule the one or more I/O operations, including a particular parameter specifying the relative weight assigned to the particular metric,
wherein the one or more parameters include a parameter specifying a length of a delay between at least two successive periods of a sequence of periods of I/O activity of the data management process.
2. (Original) The method of claim 1 wherein said data management process is executed as a portion of a data backup application.
3. (Previously Presented) The method of claim 1 wherein the plurality of metrics includes a utilization of a system resource of the one or more system resources, wherein performing the one or more I/O operations includes:
allowing said one or more I/O operations to be performed in response to the utilization of the system resource falling below a threshold indicated by a user-specified parameter; and

preventing said one or more I/O operations from being performed in response to the utilization of the system resource exceeding the predetermined threshold.

4. (Previously Presented) The method of claim 3 wherein said one or more I/O operations are performed in response to the utilization of the system resource falling below a predetermined threshold for at least a predetermined amount of time.

5. (Previously Presented) The method of claim 3 wherein performing the one or more I/O operations further includes allowing said one or more I/O operations to be performed in response to said one or more I/O operations not having been performed for longer than a predetermined timeout period.

6. (Previously Presented) The method of claim 1 wherein the one or more system resources include an input/output (I/O) subsystem.

7. (Previously Presented) The method of claim 1 further comprising selectively time slicing said one or more I/O operations dependent upon at least one metric of the plurality of metrics.

8 – 10. (Cancelled).

11. (Currently Amended) A system comprising at least one processor and a memory coupled to the processor, wherein the memory includes program instructions executable to ~~implement a method comprising:~~

monitor[[ing]] one or more system resources to obtain values of a plurality of metrics, including a first metric and a second metric; ~~and~~

execute a data management process performing one or more I/O operations dependent upon the plurality of metrics, wherein said performing includes determining a scheduling of at least one I/O operation of the one or more

I/O operations using a specified weight assigned to the first metric relative to the second metric; and
obtain user-specified values of one or more parameters to schedule the one or more I/O operations, including a particular parameter specifying the relative weight assigned to the particular metric,
wherein the one or more parameters include a parameter specifying a length of a delay between at least two successive periods of a sequence of periods of I/O activity of the data management process.

12. (Original) The system of claim 11 wherein said data management process is executed as a portion of a data backup application.

13. (Currently Amended) The system of claim 11 wherein the plurality of metrics include a utilization of a system resource of the one or more system resources, wherein performing the one or more I/O operations includes program instructions executable to:
allow[[ing]] said one or more I/O operations to be performed in response to the utilization of the system resource falling below a threshold indicated by a user-specified parameter; and
prevent[[ing]] said one or more I/O operations from being performed in response to the utilization of the system resource exceeding the threshold.

14. (Previously Presented) The system of claim 13 wherein said one or more I/O operations are performed in response to the utilization of the system resource falling below a predetermined threshold for at least a predetermined amount of time.

15. (Currently Amended) The system of claim 13 wherein performing the one or more I/O operations further includes program instructions executable to:
allow[[ing]] said one or more I/O operations to be performed in response to said one or more I/O operations not having been performed for longer than a predetermined timeout period.

16. (Previously Presented) The system of claim 11 wherein the one or more system resources include an input/output (I/O) subsystem.

17. (Previously Presented) The system of claim 11 wherein the one or more system resources include one or more central processing units (CPUs).

18. (Currently Amended) The system of claim 11 ~~wherein the method~~ further comprises comprising program instructions executable to:

selectively time ~~slicing~~ slice said one or more I/O operations dependent upon at least one metric of the one or more metrics.

19 – 21. (Cancelled).

22. (Currently Amended) A tangible, computer readable medium including program instructions computer-executable to ~~implement a method comprising:~~

monitor~~ing~~ one or more system resources to obtain values of a plurality of metrics, including a first metric and a second metric; ~~and~~

execute a data management process performing one or more I/O operations dependent upon the plurality of metrics, wherein said performing includes determining a scheduling of at least one I/O operation of the one or more I/O operations using a specified weight assigned to the first metric relative to the second metric; and

obtain user-specified values of one or more parameters to schedule the one or more I/O operations, including a particular parameter specifying the relative weight assigned to the particular metric,

wherein the one or more parameters include a parameter specifying a length of a delay between at least two successive periods of a sequence of periods of I/O activity of the data management process.

23. (Original) The computer readable medium of claim 22 wherein said data management process is executed as a portion of a data backup application.

24. (Currently Amended) The computer readable medium of claim 22 wherein the plurality of metrics includes a utilization of a system resource of the one or more system resources, wherein performing the one or more I/O operations includes program instructions computer-executable to:

allow[[ing]] said one or more I/O operations to be performed in response to the utilization of the system resource falling below a threshold indicated by a user-specified parameter; and

prevent[[ing]] said one or more I/O operations from being performed in response to the utilization of the system resource exceeding the threshold.

25 – 27. (Cancelled).

28. (Previously Presented) The method of claim 1, wherein the one or more system resources include a first system resource and a second system resource, wherein the first metric includes a utilization of the first system resource and the second metric includes a utilization of the second system resource.

29. (Previously Presented) The method of claim 1, wherein the first metric is indicative of a level of a first type of activity at a particular system resource of the one or more system resources and the second metric is indicative of a level of a second type of activity at the particular system resource.

30. (Previously Presented) The method of claim 29, wherein the particular system resource comprises a storage device, wherein the first type of activity comprises write operations, and wherein the second type of activity comprises read operations.

31. (Cancelled).

32. (Currently Amended) The method of claim [[3]]1, wherein the one or more parameters include an identification of the one or more system resources.

33. (Currently Amended) The method of claim [[3]]1, further comprising:

automatically tuning at least one parameter of the one or more parameters based at least in part on historical information associated with one or more metrics of the plurality of metrics.

34. (Currently Amended) The method of claim [[3]]1, wherein the one or more parameters include a parameter specifying an amount of data to be transferred by the data management process in each period of I/O activity of a sequence of periods of I/O activity.

35. (Cancelled).

36. (Currently Amended) The method of claim [[35]] 1, wherein a plurality of periods of I/O activity of the sequence correspond to a single backup operation, further comprising dynamically modifying the length of the delay while the single backup operation is in progress in response to a change in a value of a metric of the plurality of metrics.